Student earns $5,000 summer research grant

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Rising senior Leah Walsh works in the lab within the Tulane University Infant & Toddler Development Project alongside graduate researcher Nick Fears and Jeffrey Lockman, the facility's principal investigator. (Photo by Ryan Rivet)

Leah Walsh, a psychology and classical studies major from Fairfield, Connecticut, was studying for finals in the Howard-Tilton Memorial Library when she received an unexpected email — a notice congratulating the rising senior for earning a $5,000 summer research grant from the Psi Chi International Honor Society in Psychology.

Awarded annually to two undergraduate Psi Chi members, the grant is sponsored by the Society for Research in Child Development.

Since January, Walsh has assisted researchers who study children's perceptual and motor development at the Tulane University Infant & Toddler Development Project.

"It's nice recognition for Leah and for our lab. We're three generations (of researchers) here," says principal investigator Jeffrey Lockman.

Walsh applied for the grant under the guidance of Lockman and graduate researcher Nick Fears, who previously earned the Psi Chi grant in 2012.

Walsh is currently assisting two projects within the research center. One study examines how visual processing plays a role in children's handwriting, says Fears.

Using a head-mounted eye tracker equipped with two small cameras, the researchers record each child participating in the study as they copy letters.

"Proprietary software uses an algorithm to match when eye movement occurs and where they're looking in the space. Leah has been working on coding fixations (where the child is looking at any given time). We can take that data and analyze it to look at visual patterns while they're learning to write," says Fears.

For the second study, Walsh and fellow research assistants are scouring through children's handwriting books, analyzing the workbooks' frequency of letters. Lockman says one of their goals is to organize this material in a handwriting workbook to promote better visual-motor integration.

"Handwriting is often seen as a second-tier focus in classrooms, because there's so much emphasis put on math and reading. However, handwriting is actually a strong predictor of success in both those categories," Fears adds.

"In this lab, I've seen how important those early years are."
Leah Walsh